

UNIVERSITY OF HELMONE LIBERTS

JUN 1 1 1921 | 18 100 114

Northwestern University Bulletin

Dental School
Thirty-fifth Annual
Announcement
1921-1922

Volume XXI, Number 42

April 16, 1921

Published Weekly by Northwestern University
Northwestern University Building
CHICAGO

NORTHWESTERN University Bulletin is published by Northwestern University weekly during the academic year at Chicago, Illinois. Entered as second-class mail matter November 21, 1913, at the postoffice at Chicago, Illinois, under Act of Congress of August 24, 1912.

Northwestern University

EVANSTON and CHICAGO

Dental School

Thirty-fifth Annual Announcement 1921-1922

Published by the University May, 1921

Dental School Calendar

1921-1922

1921		
Sept. 26	Mon.	Examinations for advanced standing begin
Oct. 4	Tue.	Academic year begins
Oct. 15	Sat.	Last day for entrance in course
Nov. 24	Thu.	Thanksgiving Day
Dec. 17	Sat.	Last day of school before Christmas recess
1922		
Jan. 2	Mon.	First day of school after Christmas recess
Jan. 30	Mon.	Mid-year examinations begin
Jan. 30	Mon.	Practitioner's Course begins
Feb. 6	Mon.	Second semester begins
Feb. 22	Wed.	Washington's Birthday
Feb. 25	Sat.	Practitioner's Course ends
May 30	Tue.	Memorial Day
May 29	Mon.	Senior examinations begin
June 5	Mon.	Junior, Sophomore and Freshman examinations be
June 12	Mon.	Commencement Banquet
June 13	Tue.	Home Coming Clinic
June 14	Wed.	SIXTY-FOURTH ANNUAL COMMENCEMENT

The University

N the last day of May, in the year 1850, there met in the City of Chicago, at the office of Grant Goodrich, 109 Lake Street, near Dearborn, nine men, Richard A. Blanchard, Jabez K. Botsford, Andrew J. Brown, Henry W. Clark, John Evans, Grant Goodrich, Zadoc Hall, Richard Haney, and Orrington Lunt, to consider the founding of a university in the vicinity of Chicago. They agreed that "the interests of Christian learning demand the immediate establishment of a University in the Northwest," and appointed a committee to petition the General Assembly for a charter. January 28, in the next year, 1851, Governor French signed the Act that incorporated "the Trustees of the Northwestern University." The name of the corporation has since been changed to Northwestern University.

The first Board of Trustees consisted of thirty-six persons, some of whom were representatives of annual conferences of the Methodist Episcopal Church and some residents of Chicago or vicinity. The corporation as at present constituted consists of thirty-six trustees elected by the Board, and two elected by each of three annual conferences of the Methodist Episcopal Church, making a total of forty-two.

The charter provides that a majority of the Board shall be members of the Methodist Episcopal Church, but that no particular religious faith shall be required for those who become students at the institution.

Amendments have provided that other chartered institutions may become departments of the University; that all property of whatever kind or description belonging to or owned by the said corporation shall be forever free from taxation for any and all purposes; that no spirituous, vinous, or fermented liquors shall be sold under license or otherwise within four miles of the location of the University.

After considering several locations in the vicinity of Chicago, the Trustees selected for the University a tract of land on the shore of Lake Michigan, twelve miles north of the heart of Chicago. Here in 1855 the first University building was erected, and about this location has grown up the City of Evanston, a beautiful residential city of thirty thousand inhabitants. The professional schools of Medicine, Law, Dentistry, and Commerce are situated in the city of Chicago.

NORTHWESTERN UNIVERSITY DENTAL SCHOOL

Administrative Officers

Walter Dill Scott, Ph.D., President of the University. Thomas Lewis Gilmer, M.D., D.D.S., Sc.D., Dean Emeritus. Arthur Davenport Black, A.M., M.D., D.D.S., Sc.D., Dean. Otto Ulysses King, D.D.S., Secretary.

The Faculty

Thomas Lewis Gilmer, M.D., D.D.S., Sc.D., Professor of Oral Surgery.

Arthur Davenport Black, A.M., M.D., D.D.S., Sc.D., Professor of Dental Pathology and of Operative Dentistry.

Edmund Noyes, D.D.S., Professor of Dental Jurisprudence and Ethics.

James Harrison Prothero, D.D.S., Professor Emeritus of Prosthetic Dentistry.

Twing Brooks Wiggin, M.D., Professor of Physiology.

Ira Benson Sellery, D.D.S., Professor of Orthodontia.

Harry Mann Gordin, Ph.D., Professor of Chemistry.

Eugene Shaw Willard, D.D.S., Professor of Bacteriology and Dental Pathology.

Fred William Gethro, D.D.S., Professor of Operative Dentistry.

Herbert Anthony Potts, D.D.S., M.D., Professor of Oral Surgery.

William Bebb, M.S., D.D.S., Professor of Comparative Anatomy; Curator of the Museum.

Robert Edwin Blackwell, D.D.S., Professor of Operative Dentistry. William Graham Skillen, D.D.S., Professor of Histology.

Joseph Emerson Ridgway, D.D.S., Professor of Prosthetic Dentistry. George Bion Denton, Ph.D., Professor of English.

Edward Howard Hatton, M.D., Professor of Pathology; Special Research Investigator.

Lt. Col. Junius Claibourne Gregory, Professor of Military Science and Tactics.

Otto Ulysses King, D.D.S., Lecturer in Dental Economics.

John Frederick Christiansen, D.D.S., Assistant Professor of Radiology; Superintendent of the Clinic.

George Edward Meyer, D.D.S., Assistant Professor of Oral Surgery. Michael Joseph Buckley, D.D.S., Assistant Professor of Orthodontia.

Charles West Freeman, D.D.S., Assistant Professor of Oral Surgery. Frederick William Merrifield, D.D.S., Assistant Professor of Dental Pathology.

Rolfe Tainter, M.D., Assistant Professor of Anatomy and Pathology. Harris Walker McClain, Ph.G., D.D.S., Assistant Professor of Materia Medica and Orthodontia.

Herbert Scott Ray, D.D.S., Assistant Professor of Operative Dentistry.

Hillis Talley Brown, D.D.S., Assistant Professor of Anatomy. John Sanford Kellogg, D.D.S., Assistant Professor of Prosthetic Dentistry.

Walter Darrow Bayard, A.B., M.D., Instructor in Physiology. Charles Edward Wach, Ph.G., D.D.S., Instructor in Physiology. Stanley William Clark, D.D.S., Instructor in Oral Surgery.

Leon A. Marks, Ph.G., Instructor in Chemistry.

William Walter Jones, D.D.S., Instructor in Histology.

Gottfred Rudolph Lundquist, D.D.S., Instructor in Oral Surgery. Henry Donald Meyer, D.D.S., Instructor in Operative Technics.

William Leroy Wylie, D.D.S., Instructor in Operative Dentistry.

Olaf J. Pederson, A.M., M.D., Instructor in Anatomy.

William L. Winters, B.S., Instructor in Anatomy.

Frank Blaine Rhobotham, D.D.S., Instructor in Materia Medica.

Roy F. Webster, A.B., Instructor in Physics.

Edwin Samuel Youngberg, B.S., Instructor in Technical Drawing. Ray McKinley Dix, D.D.S., Instructor in Dental Anatomy and Operative Technics.

Loren Dana Sayre, D.D.S., Instructor in Prosthetic Dentistry. Arthur Tanner, D.D.S., Instructor in Prosthetic Dentistry.

Charles Currier Dodge, D.D.S., Examiner of Patients.

William Archibald Gilruth, D.D.S., Instructor in Operative Dentistry.

Huston French Methven, D.D.S., Instructor in Prosthetic Dentistry. Russell Reed Williams, D.D.S., Instructor in Operative Dentistry. Robert Ray Henderson, D.D.S., Instructor in Dental Anatomy. Melvin Austin Root, Jr., D.D.S., Instructor in Operative Technics.

Kendall Spangler Tillotson, D.D.S., Instructor in Operative Technics.

Walter William Dalitsch, D.D.S., Instructor in Prosthetic Technics. Wilfrid Irvin Dinan, D.D.S., Instructor in Prosthetic Dentistry. Nels Oynes, D.D.S., Instructor in Prosthetic Dentistry. Otto Werner Silberhorn, D.D.S., Instructor in Prosthetic Dentistry. Harold Godfrey Wedell, D.D.S., Instructor in Prosthetic Technics. John Goddard Seise, D.D.S., Instructor in Prosthetic Technics.

Horace Cayley Buttery, D.D.S., Instructor in Prosthetic Technics.

STUDENT ASSISTANTS

James R. Schumaker, Assistant in Histology.
Ray H. Taylor, Assistant in Anatomy.
William M. Adams, Assistant in Anatomy.
Dennis Delph, Assistant in Physics.
Michael H. Dally, Assistant in Technical Drawing.
Edgar W. Swanson, Assistant in Operative Technics.
Reuben N. Olson, Assistant in Chemistry.
Meyer S. Poliak, Assistant in Chemistry.
Raymond E. Meese, Assistant in Chemistry.
Clyde C. Sheppard, Assistant in Radiology.
William H. Sprunt, Assistant in Radiology.
Walter J. Gillespie, Assistant in Physiology.
Harry Nortell, Assistant in Biology.

STANDING COMMITTEES OF THE FACULTY

Executive: Courses of study, general policy, student discipline; ad interim committee. Dean, Secretary, Professor Gilmer, Professor Blackwell, Dr. Christiansen.

University Council: Dean, Secretary, Professor Noyes.

Credentials and Graduate Courses: Credentials for advanced standing, graduate and post-graduate courses. Dean, Secretary, Professor Gilmer.

Library and Museum: Collections, exhibits, library expansion, catalogues. Professor Bebb, Professor Potts, Professor Skillen.

Faculty Affairs: Faculty meetings, programs. Professor Hatton, Professor Potts, Professor Merrifield.

Student Relations: Social, athletic, religious, fraternal relations. Professor Christiansen, Professor Gethro, Professor Denton.

Student Council: The Student Relations Committee and two members of each class.

Faculty Instruction Groups: See page 23.

The Dental School

THE DENTAL SCHOOL was founded and is maintained for the purpose of preparing young men and young women in the most thorough manner for the practice of dentistry, and for the promotion of dental science and dental literature.

The reputation earned by this School is well shown by the tabulation, on page 46, of the geographical distribution of students in attendance during the past year, from thirty-seven states and four foreign countries.

The Dental School was organized in 1887 and three years later became a department of the University. In 1896 it absorbed the American College of Dental Surgery and for some years occupied the building on Franklin and Madison Streets, Chicago. It is now located in Northwestern University Building, at the corner of Lake and Dearborn Streets, Chicago, occupying the upper three floors of the building, over 60,000 square feet.

The following men are deserving of permanent recognition for their devotion to this School, as evidenced by their work in its development: Doctors Thomas L. Gilmer, G. V. Black, Edgar D. Swain, George H. Cushing, Theodore Menges, C. R. E. Koch, W. V-B. Ames and James H. Prothero.

BUILDING AND EQUIPMENT

Northwestern University Building is in the transportation center of over three millions of people living within a radius of forty miles, a location especially advantageous for obtaining the great number of clinical patients needed in a dental school. See page 15 for statement of number of patients and operations performed during the last School year.

The operative clinic, sufficient in extent to accommodate the great clinic and the offices connected with it, is of the best design of construction, consisting of a single room with arched ceiling. It is on the sixth floor, with free light on two sides and abundant skylight. Adjoining the operative clinic is the prosthetic clinic, and on the same floor the special clinic for pulp treatments, the senior prosthetic laboratory for crown and bridge work, the laboratory for porcelain and cast metal inlay work, an impression room, and two rooms and waiting-room for extracting, and a room devoted to radiographic work. There are seven lecture-rooms, three of which are arranged on the amphitheater plan and have seats for 240 students. One of these

is for the oral surgery clinic which has a waiting-room for surgical patients, a room for diagnosis and the preparation of patients, and a recovery room with sufficient beds for the temporary care of patients. The other four lecture rooms have seats for 175, 125, 100, and 75 students. There are eight recitation rooms, each accommodating thirty-five or more students. Other rooms are the anatomical laboratory, which is placed well apart, and the laboratories for prosthetic technics, operative technics, chemistry, biology, histology, physiology, general pathology, bacteriology, materia medica, and for physics; the students' reading-room, the library, and the museum.

A new laboratory for scientific research is equipped with every facility for advance study of the many unsolved problems which confront the dental profession. This laboratory has every convenience for bacteriological study, animal experimentation and the study of human material from the general and oral surgery clinics.

THE THEODORE MENGES LIBRARY

The Library and the adjoining reading-room occupy, together with the attached Journal Reading Room, 5,400 feet of floor space. It is furnished with reading tables and chairs for about one hundred students. The Library contains 7,429 volumes of books on dental and collateral subjects; a fine supply of dictionaries and encyclopedias conveniently placed in the reading-room for easy consultation; and a nearly complete list of the dental journals that have been published in the English language, with about 85,000 duplicate numbers. The books most used by the students are duplicated, up to six or twelve, and a few to fifteen copies. The books and journals may be used in the reading-room without restriction, and when the duplication of volumes will allow, they may be drawn out as a circulating library.

THE G. V. BLACK MUSEUM

The Museum, which in many of its sections is the most complete collection of illustrative material in existence, is open to inspection and study. The cases are arranged to show the specimens to the best advantage.

Recently the very extensive private collection of Dr. William Bebb has been added to the Museum under the title of the Bebb Collection. This collection consists of paleontological and modern animal and human bones, skeletons and skulls; many varieties of preserved fur animals, and a very choice collection of ancient and

modern-obsolete dental instruments, tools and equipment; many volumes of rare old books on dentistry in various languages; and engravings, paintings, lithographs, and cartoons illustrative of the development of dentistry. All of these have been arranged in most attractive manner for exhibition and study.

The comparative anatomy specimens consist of heads with the teeth, with the exception of the gorilla and chimpanzee, of which there are full skeletons. There is a sufficient number of varieties of each of the several orders to afford specimens of every kind of tooth form and of every variety of placement in mammals, saurians, and snakes, with a large variety of fishes.

The principal specimens of human skulls are, first, an excellent mounting of the separated bones of the adult; second, a fine set of dissections in a series showing the development of the teeth and the roots from the first appearance in the fetus to the full adult development, and illustrating the absorption of the roots of the deciduous teeth, the shedding process, and the replacement by permanent teeth; also the absorption of the alveolar processes after the loss of teeth, with the changes that occur in the form of the bones of the jaws from childhood to old age.

The Museum contains also a valuable collection of human teeth of abnormal forms; a very full and complete set of specimens illustrating interproximal wear and the flattening of the points of interproximal contact. It is especially rich in casts of cases of supernumerary teeth; some illustrations of the very early forms of artificial teeth, of manufactured porcelain teeth, and of dental instruments, illustrating the development in these lines. This collection has been made in the School largely by students and by alumni, and is being continually increased by donations from those who have met with specimens unusual or rare in practice.

It also contains a most complete representation of the progress of Dental Hygiene and Prophylaxis as represented by the progressive steps of the development of the toothbrush, and a complete collection of dental instruments and appliances now obsolete in modern practice of dentistry.

SITUATION AND SURROUNDINGS

The central location of the school and its convenient access from every point affords many and peculiar advantages to its students. It gives them the widest possible range of choice of residence while attending the school, without inconvenience in coming and going. It also gives the school the widest range of territory from which to draw the extensive clinic so necessary to a great dental school. The patients for this clinic come from all parts of the city of Chicago and its suburbs. The personal influence of the students of the school, each one of whom draws from his own friends and acquaintances, made in and about his place of residence, is an invaluable adjunct to the number who come simply as acquaintances of the school. Patients who come as the friends of students make up the personal clinical practice of the individual student.

In this the out-of-town students seem to be in no respect less favored than the student whose home is in the city. This gaining, and holding, a personal clinical practice under the supervision of the instructors in the clinic rooms has come to be one of the features of this school that has a telling effect upon the after-practice of its students. By this plan of work the student not only learns the theory of practice and the manipulations of practical operations in dentistry, but he passes at once to the work of real experience in building a practice for himself; in gaining that skill in professional comity and personal manner between himself and his patients, which is as necessary to him in after years, in drawing together and maintaining a practice, as his knowledge of dental diseases and his skill in their treatment.

For these reasons the residence of students in groups in widely different portions of the city is favored. This also gives the benefits of a more homelike life, while giving in the aggregate a far better conception of life in a great city and decidedly better opportunity to draw upon its advantages, while shunning the disadvantages of large gatherings of students in a single locality.

Chicago is a great city and gives many opportunities to the student who learns to avail himself of them. Lincoln Park on the north offers, besides its beautiful pleasure grounds, some extensive botanical gardens and winter conservatories, where all manner of plants may be enjoyed and studied; a fine zoölogical collection, where a large variety of animal and bird life may be studied, and the Museum of Natural History, in which there is a very large collection of birds, animals and fossil remains of extinct animal life. Jackson and Washington Parks on the south, besides their extensive pleasure grounds, also offer splendid botanical gardens and winter conservatories. The new Field Columbian Museum, located in Grant Park, offers a rare collection of Natural History specimens especially suited for the study of comparative dental anatomy, of

modern and ancient skulls and the condition of the teeth in the various races and types of men in different ages. The admission to this museum is free to students on presentation of their matriculation tickets to this school.

The Art Institute of Chicago is located within easy walking distance of the School; it offers many free admission hours, making its cultural opportunities conveniently available.

OTHER LIBRARIES

A number of libraries are accessible to students who have taste for study, or for looking up subjects of scientific or literary interest, or in connection with special studies.

The University library collections offer very abundant facilities for students. They are ample in the number of books adapted to the different schools and are so situated as to be easily accessible; generally within the school buildings. They consist of the College Library, the Law Library, the Medical Library and the Theological Library.

CHICAGO LIBRARY (1,087,286 volumes) is on Michigan Avenue and Washington Street, five minutes' walk from the School. It is one of the finest libraries in the country. Students may receive books from this library when vouched for by responsible persons known to the officials. This library has also many branch offices in different parts of the city, from which books may be received on application. These are convenient to many of the boarding places of students.

THE NEWBERRY LIBRARY is very large (386,000 volumes) and, besides general works, has also a large collection devoted to history. It is on North Clark Street and Walton Place, and may be reached in a ten minutes' walk. This is a reference library and books can be used only in its reading rooms.

THE JOHN CRERAR LIBRARY (450,000 volumes) occupies its own building, corner Michigan Boulevard and Randolph Street, five minutes' walk from the School. It is devoted mainly to the natural, the physical and the social sciences, with their applications, but has one large room containing medical and dental books and periodicals. It is a most excellent collection of books. It is a reference library, and its books are used only in its reading rooms.

Admission and Instruction

In teaching staff, requirements for admission, curriculum, equipment and facilities of every kind, Northwestern University Dental School complies fully with the rules of the Dental Educational Council of America for Class A Dental Schools. This School is one of ten dental schools selected by the United States Government for the establishment of Reserve Officers' Training Corps.

Attention is directed to the change in entrance requirements for the year 1921-1922. Dentistry needs more practitioners with broader education, and all who can afford to do so are urged to take more than one year in a College of Liberal Arts before entering dental school. Extra time devoted to college courses will be of much advantage in the future.

ENTRANCE REQUIREMENTS FOR YEAR 1921-1922

Beginning with the school year 1921-1922, one year of Liberal Arts will be required for admission to the Dental course.

A candidate for admission may be accepted on presentation of the following credits:

High School: Fifteen units from an accredited high school or academy, which shall include three units of English, two units of foreign language, one unit of algebra, one unit of geometry and one unit of physics. The remaining seven units may be made up of other subjects in standard High School courses.

College: Thirty semester-hours in a College of Liberal Arts which is recognized by Northwestern University, which shall include six semester-hours of English, six semester-hours of inorganic chemistry and six semester-hours of zoölogy or biology.

If physics is not offered for entrance, it must be taken during the first year of the dental course. High school chemistry, biology or zoölogy cannot be substituted for the college credits required in chemistry and zoölogy.

This School will receive no student who is not present within ten days after the opening day of the session in each year, or in case of illness properly certified by the attending physician, within twenty days after the opening day. It is desirable that students should register early, since the order of assignment of seats in the lecture halls is based on the order of registration. The record of attendance is kept from the opening day, and students who may be admitted at a later day will lose their attendance credit for the intervening period.

Undergraduate students are not received for special courses.

ADMISSION TO ADVANCED STANDING FOR YEAR 1921-1922

Students wishing credit for courses parallel to courses required in this School should bring credentials for same, and should present their notebooks.

Students who present certificates from other dental schools covering subjects required in this School may be credited with such studies if the credentials are satisfactory to the Dean and to the professors in the respective departments; but credits are not accepted unconditionally. The Faculty reserves the right to examine any applicant for advanced standing, if in its judgment that should be desirable.

No student will be accepted by transfer for matriculation in the sophomore or junior class unless the previous record is creditable and without a condition. Students will not be accepted by transfer from other schools for matriculation in the senior class, except in cases in which credentials and other evidence show the applicant to be exceptionally well qualified. Credentials of all students applying for advanced standing must be approved by the Committee on Credentials for Advanced Standing.

Examinations for advanced standing and for the removal of conditions in the Dental course will begin on September 26, 1921—one week before the course begins—and no make-up examinations will be given at a later time. A schedule of these examinations will be furnished upon request.

COURSE FOR THE DEGREE OF DOCTOR OF DENTAL SURGERY

The course covers four years. The year begins on the first Tuesday in October and closes on Commencement Day of the University in June. There are not less than thirty-two weeks of actual instruction given, six days in each week.

RESERVE OFFICERS' TRAINING CORPS

At the request of the Surgeon-General of the Army, a Reserve Officers' Training Corps was established during the year 1920-1921. This course is optional in the Freshman and Sophomore years for all students who can pass physical examinations, except aliens. Those who, at the beginning of the Junior year, are given the opportunity and choose to continue through the remainder of the course, must

meet all requirements, as in other courses, to graduate. R.O.T.C. students will be required to attend a medical military camp for six weeks during the summer following the Junior year. Each R.O.T.C. student will receive about sixteen dollars per month during the Junior and Senior years, and thirty dollars per month, also transportation, quarters, rations, etc., during the summer camp. Uniforms will not be worn, and there will be no military training or drills, except in the summer camp. R.O.T.C. graduates will be eligible for service in the Army Dental Corps, but cannot be called for service except in case of war.

POST-GRADUATE COURSE

A post-graduate, or practitioner's, course has been arranged which begins the first Monday in February of each year and continues through four full weeks. A special announcement of this course will be sent on request. See page 45 for list of those who took post-graduate course in February, 1921.

HYGIENISTS' COURSE

A dental hygienist's course has been arranged for young women, and will be given during the year 1921-1922, provided the Illinois Legislature enacts a law authorizing the licensing of dental hygienists. The course will begin the first Tuesday in October, and continue until June. A special announcement will be sent on request.

COMBINED COURSES

Students who desire to obtain the Bachelor of Science and Doctor of Dental Surgery degrees may enroll on a combined Literary and Dental course, and thus shorten the required time for earning the

two degrees from eight to seven years.

Students who desire to obtain the degrees of Doctor of Medicine and Doctor of Dental Surgery may enroll for a combined medical and dental course, and thus shorten the time of earning these degrees from nine to seven years, which includes one year of hospital internship. In order to enroll for this course it will be necessary for the student to have completed the two required pre-medical years in a College of Liberal Arts.

Students who desire to obtain the three degrees, Bachelor of Science, Doctor of Medicine and Doctor of Dental Surgery, may do so by taking three years in the College of Liberal Arts before entering

upon the combined medical and dental course.

Details regarding the combined courses will be furnished upon application.

General Statements

REQUIREMENTS FOR A DEGREE

The degree of Doctor of Dental Surgery is conferred upon students recommended therefor by the Faculty of the School. Candidates are recommended who have attended the required courses of lectures, who have passed satisfactorily all required examinations in the subjects of study; who have completed the required clinical and laboratory work; who in the judgment of the Faculty are of fit moral character and are twenty-one years of age, and who have discharged in full all financial obligations to the University.

HONORS

A dental scholastic honor society, the Omicron Kappa Upsilon, was organized in 1916, upon the initiative of Northwestern University Dental School.

Membership is awarded to students who throughout their dental course have met every requirement without condition or failure, and whose record of grades earned during their entire course gives them highest rank. Twelve per cent of the graduating class of each year can achieve the honor of such membership.

SUMMER CLINICS

The clinic rooms will be open all the year for the benefit of students who may wish to gain greater experience in clinical practice under competent supervision. The number of demonstrators during the summer will be ample for the class that may choose to remain at the school. The clinical material is abundant, and an excellent opportunity is afforded for clinical practice.

CLINICAL MATERIAL

The value and adequacy of the clinical instruction and experience in practice to students is inestimable. The extent of it can be best understood by an examination of the subjoined statement of patients cared for and operations performed during each year from 1913 to 1920.

Due to the change from the three- to the four-year course, both the Senior and Junior classes for 1919-20 and 1920-21 were unusually small, and it was impossible to care for many persons who applied for clinic service. The number of patients and the operations mentioned for these years are therefore considerably less than the School's average:

				Patients	Operations
For	the	year	1913-14	15,087	94,068
"		"	1914-15	17,529	93,793
	"		1915-16		96,455
"	"	"	1916-17	17,868	96,620
66	66	"	1917-18		61,898
"	6.6	"	1918-19		44,986
"	"	"	1919-20		40,157

TEXT-BOOKS

Text-books and reference books will be on sale in the Library of the school at publishers' prices. There will be a small profit from the sale of these books, which will be used for the benefit of the library. Each student will be required to have the books designated before participating in either recitation or laboratory exercises. Many reference books in the library may be used as needed.

INSTRUMENTS

The instruments essential to the students in the several departments of the school have been carefully studied and determined. Much care has been taken in the selection of the instrument sets that the variety of forms may be sufficient for the student's needs without being excessive. Close study of this subject and long, careful observation of students and the progress they make in the attainment of manipulative skill show their progress to be closely related to their instrument equipment. Therefore this school must demand that the instrument sets required be obtained by each student as a condition to his continuance in school work.

In operative dentistry it is found that a close adherence to the formula plan, in the study of cutting instruments particularly, is essential in teaching the important subject of cavity preparation, and this will be carried out critically in all the departments of the school. This teaching is begun in the technic classes and the same lines of instruction are followed progressively by teachers and demonstrators in all of the departments to the end of the Senior year, the same instrument sets being used throughout the course of study.

In prosthetic dentistry and in the several laboratories a similar care as to instruments is maintained.

no case returnable.

Fees and Expenses

FOR THE YEAR 1921-1922

Registration Deposit, each year.....\$10.00

This deposit must be paid when names are enrolled for classes. It will be credited on the tuition fee for the current year. It is not returnable in case the student fails to attend. If the first matriculation of the student is in the Dental School, the matriculation fee will serve as a registration fee for that year, but the matriculation fee is not credited on the tuition fee.

Tuition Fee, each year.....\$250.00

This fee includes the registration deposit, but not the matriculation fee. It includes all laboratory fees for equipment and supplies, but not for manuals and notebooks. Each student is provided with a locker for the protection of his private property. Each Freshman will be charged for three new padlocks for his lockers. Each student operating in the clinic will be charged a towel fee each year.

Final Examination fee, for Seniors.....\$20.00

Time of Payment of Tuition—The tuition fee is payable at the beginning of the school year. It may be paid in two installments, \$125.00 at the beginning of the first semester and \$125.00 at the beginning of the second semester. If installments are not paid within ten days of the opening of the semester, \$2.00 will be added, but in no case may payment be deferred more than thirty days. Payments should be made in currency or in Chicago exchange drawn to the order of Northwestern University. Out-of-town personal checks are not accepted.

Refunds—No fees for tuition will be refunded except in cases of sickness. If on account of serious illness a student withdraws from the School before the end of the school year, a share of his tuition fee may be refunded, provided he secures from the Dean a statement of honorable standing, and from a physician a certificate that his health will not permit him to remain in attendance. No

application for a refund will be considered unless made within thirty days after withdrawal from the School on account of sickness.

COST OF BOOKS AND EQUIPMENT

The amounts given below are as nearly correct as can be determined in advance, owing to the changes which may occur in prices or in the selection of books, instruments and other equipment. As many of the books and almost all of the other equipment listed for each of the first three years are required in the succeeding years, the figures given apply only to those students entering this school as Freshmen. Students entering with advanced standing, or by transfer from other Dental Schools, will be required to purchase whatever may be necessary of the books and equipment listed for preceding years.

For the year 1921-22, the School will supply the books and equipment for the several classes. In order to reduce the cost of equipment as much as possible, the School will supply certain items, such as student operating cases, etc., which the student will not need

after graduation, upon a rental basis.

Every student is required to purchase the complete outfit of

books and equipment from the School.

The student should come prepared to pay for the complete outfit of books and instruments at the opening of school, in addition to at least the first semester tuition.

ESTIMATE OF COST OF BOOKS AND EQUIPMENT FOR EACH CLASS FOR THE YEAR 1921-1922

1011 1111 12111 1311
Freshman year, books as per required list, about
Sophomore year, books, about
Junior year, books, about
\$ 60.00 Senior year, books, about
ESTIMATE OF TOTAL EXPENSES FOR FOUR-YEAR COURSE
Freshman year, matriculation, tuition, books and equipment\$ 450.00 Sophomore year, tuition, books and equipment

This is an average of about \$385.00 per year. The equipment includes practically everything required for a dentist's office, except dental chair and office furniture, so that while the expense for equipment in school is considerable, it should not be counted as a school expense, but rather as a part of the expense of office equipment. After the Sophomore year, the expense in addition to the tuition is small, so that the student is likely to be better prepared to meet the cost of office equipment at the time of graduation.

UNIVERSITY NOT RESPONSIBLE FOR PERSONAL LOSSES

The University is not responsible for the loss of any personal property belonging to any of the students in any building owned by the University, whether the loss occurs by theft, fire, or an unknown cause.

CHARGE FOR BREAKAGE

Students will be held responsible for unnecessary damage to or breakage of the apparatus, equipment, furniture or other property of the University.

STUDENTS' EXTRA FUNDS

Students who bring with them larger amounts of funds than their immediate requirements necessitate may deposit the same in the University business office, in the rotunda on first floor, and draw on this deposit from time to time as needed, under such regulations as may be prescribed.

BOARD AND ROOM

Rooms and board may be obtained at about \$15.00 a week. Rooms without board, furnished or unfurnished, may be had at about \$25.00 a month.

A department of the Y. M. C. A. is maintained in the University Building, which looks especially to the students' interest in this direction.

In case students are compelled to do some outside work to assist them while attending school, this department will also endeavor to secure such employment as the student may be able to do without detriment to his educational work.

THE UNIVERSITY DORMITORIES

The University dormitories are situated on the North Campus near the University Gymnasium, and within a five-minute walk to the Elevated trains with direct service to Chicago.

Applications for the reservation of rooms should be made to the Secretary of the Dental School and should be accompanied by a deposit of \$10.

Courses-1921-1922

In 1915-16, this School adopted the general plan of teaching by the division of classes into small sections for recitation and laboratory periods, in order that the student might receive more thorough instruction. To accomplish this, the building was remodeled to provide necessary additional rooms and laboratory facilities, and the teaching staff was increased in every department.

A general rearrangement of courses has been made by which better co-ordination and sequence of related subjects has been obtained.

REGULAR FOUR-YEAR CURRICULUM FRESHMAN YEAR

L	Hours :	a Week	Hours	a Year
	ecRec.	Laboratory	Lec.:Rec.	Laborat
	2	6	64	192

Anatomy	2	6	64	192
Histology	2	4	64	128
Chemistry, Organic and				
Physiological	2	4½ Aver.	64	96
Dental Anatomy		Sem.) 6 (1st Sem.)		96
Operative Technics		Sem.) 6 (2d Sem.)	32	96
Prosthetic Technics	2	6	64	192
	_			
	10	26½	320	7481,068
R.O.T.C. (optional)	I			

SOPHOMORE YEAR

		Hours a W Rec. I				a Year Laboratory
Physiology	2		3		64	96
Bacteriology	2		3		64	96
*Pathology	I		3		32	96
Materia Medica and			_			
Therapeutics	I		3 (1	Sem.)	32	48
Comp. Dental Anatomy			2 (1	Sem.)	16	32
Operative Technics	2		3		64	96
Prosthetic Technics	I		9		32	288
Orthodontia Technics			3 (1	Sem.)	16	48
Mouth Hygiene	1	(I Sem.)	· · ·	,		
	10		25		320	800-1,120
R.O.T.C. (optional)	I					

^{*}In Junior course in 1921-22, in both Junior and Sophomore courses in 1922-23.

Physiology

eases, Operative and

Prosthetic Dentistry

Clinical Practice in Ofthodontia, Operative and Prosthetic Dentistry

R.O.T.C. (optional)

Hours a Year Lec.-Rec. Laboratory

32

JUNIOR YEAR Hours a Week

Lec.-Rec. Laboratory

Principles of Medicine	I	32
Dental Pathology	1 3 (1 Sem.	.) 32 48
Dental Radiology	ı (ı Sem.) ı (ı Sem.) 16 16
Orthodontia	ı	32
Operative Dentistry	2	64
Prosthetic Dentistry	ı 3	32 96
Principles of Surgery	ı (ı Sem.)	16
Anesthesia	ı (ı Sem.)	16
Extraction Clinic	ı (ı Sem.	.) 16
Clinical Operative and		
Prosthetic Dentistry	24 ¹ / ₂	784
	8½ Aver. 30	272 960—1,232
R.O.T.C. (optional)	I	
	SENIOR YEAR	
т	Hours a Week ecRec. Laboratory	Hours a Year LecRec. Laboratory
*Dental Pathology	2	64
Jurisprudence and Ethics.		16
Dental Economics	ı (ı Sem.)	16
*Oral Surgery	2 2	64 64
*Operative Dentistry		0+ 0+
	2	2.2
	2	32
*Prosthetic Dentistry	2	64
*Prosthetic Dentistry Orthodontia	_	•
*Prosthetic Dentistry Orthodontia Special Clinics for Divisions	2	64
*Prosthetic Dentistry Orthodontia	2	64

91/2

{ for each } Division }

272

30

3+

64

960

1,088-1,360

^{*}One hour each week will be devoted to seminar work, consisting of the reading and discussion of themes prepared by members of the class.

CURRICULUM FOR STUDENTS WHO MATRICULATED IN 1920 WITH 15 HIGH SCHOOL UNITS*

FRESHMAN YEAR

ĭ		Week Laboratory		
English	2	zzanoraco. y	64	13410714101.3
Physics	I	3 (1 Sen	1.) 32	48
Technical Drawing		3 (1 Sen	n.)	48
Biology	2 (1st Se	m.) 4 (1st Se	em.) 32	64
Anatomy	ı (ı Sem	.) 6 (1 Sen	n.) 16	96
Chemistry, Inorganic, and				
Metallurgy	2	4 .	64	128
Histology, General	2 (2d Ser	n.) 4 (2d Se	m.) 32	64
Dental Anatomy	ı (ıst Se	m.) 6 (1st Se	em.) 16	96
Operative Technics	ı (2d Ser	n.) 6 (2d Se	m.) 16	96
Prosthetic Technics	I	9	32	288
Mouth Hygiene	I		16	
	_			
	101/2	29	320	928—1,248
R.O.T.C. (optional)	I			

SOPHOMORE YEAR

I							Hours LecRec.	a Year Laboratory
English	I	(1	Sem.)				16	
Anatomy of Head and Neck	2	(1	Sem.)	9	(1	Sem.)	32	144
Histology, Dental	I			3			32	96
Chemistry, Organic and								
Physiological	I			3			32	96
Materia Medica and								
Therapeutics	I			3	(1	Sem.)	32	48
Physiology	2			3	(r	Sem.)	64	48
Bacteriology	I			3			32	96
Comparative Dental Anat-								
omy	I	(1	Sem.)				16	
Operative Technics	2			6	(1	Sem.)	64	96
Prosthetic Technics	I			9			32	288
Clinical Operative and								
Prosthetic Dentistry				6	(20	l Sem.)	96
	_			_				
	ΙI			29	/2		352	912-1,264
R.O.T.C. (optional)	I							

^{*}This Freshman course will not be given in 1921-22. The Junior and Senior years are the same as the corresponding years of the regular four-year course (except course in general pathology; see footnote, page 20).

Outlines of Courses of Study

In order to secure the best possible co-ordination in teaching, the courses of study are arranged in nine groups, and the teaching staff of each group constitutes a faculty group committee. The outlines of courses appear in the order of this group arrangement, which is as follows:

- 1. Chemistry, physics, metallurgy.
- 2. Anatomy, histology, embryology.
- 3. Physiology, materia medica, pharmacology.
- 4. Bacteriology, pathology, hygiene.
- 5. Operative dentistry.
- 6. Prosthetic dentistry.
- 7. Oral surgery.
- 8. Orthodontia.
- 9. Ethics, jurisprudence, economics, history, English.

Chemistry—Metallurgy

PROFESSOR GORDIN

FRESHMAN YEAR

- *a. Lecture-recitation—Organic Chemistry—Composition and classification of organic compounds and the study of individual groups. First semester. Two hours a week. Professor Gordin and Mr. Marks.
- b. Laboratory—Qualitative organic analysis and preparation of organic compounds representing important groups. First semester. Class divided into sections, each section three hours a week. Professor Gordin and Mr. Marks.
- c. Metallurgy and Quantitative Inorganic Analysis, Gravimetric and Volumetric—The examination of metals, alloys, amalgams and solders, particularly those used in dentistry. Fusing points and eutectic points. Preparation of low-fusing alloys. Refining of gold and silver and their recovery from scrap materials. First semester. Class divided into sections, each section three hours a week. Professor Gordin and Mr. Marks.

^{*}For all lecture-recitation courses, lectures are given to the entire class, and the class is divided into sections of about forty for recitations. As a rule, there are three recitation periods following each lecture.

- d. Physiological Chemistry Lecture-recitation The fundamental principles of the chemistry of the material bases of the body. Second semester. One hour a week. Professor Gordin and Mr. Marks.
- e. Laboratory Work in Physiological Chemistry Characteristic reactions of proteins and carbohydrates. Practical study of salivary, gastric and pancreatic digestion. Analysis of teeth and saliva. Urine analysis. The qualitative and quantitative determination of the constituents of normal and pathologic urine. Second semester. Class divided into sections, each section three hours a week. Professor Gordin and Mr. Marks.

Anatomy

PROFESSOR TAINTER

FRESHMAN YEAR

- a. Lecture-recitation—Osteology of the Entire Body—Twelve weeks, class divided into sections, each section one hour a week. Dr. Tainter and Dr. Pederson.
- b. Lecture-recitation Syndesmology and Myology Four weeks, one hour a week. Dr. Tainter and Dr. Pederson.
- c. Laboratory—Human Dissections—The upper or lower extremity and the abdomen are dissected. First semester. Class divided into sections, each section two three-hour periods each week. Dr. Tainter, Dr. Pederson, Mr. Winters, and Assistants.
- d. Lecture-recitation—Angeology, Neurology, Organs of the Senses and Splanchnology—Second semester, one hour a week. Dr. Tainter and Dr. Pederson.
- e. Laboratory—Human Dissections—The Head, Neck and Thorax. Surgical anatomy of the Head and Neck. Second semester. Class divided into sections, each section two three-hour periods a week. Dr. Tainter, Dr. Pederson, Mr. Winters, and Assistants.

SOPHOMORE YEAR

In 1921-22, the Sophomore class will have the course in anatomy as scheduled above for the Freshman class during the second semester.

Comparative Dental Anatomy

PROFESSOR BEBB

SOPHOMORE YEAR

- a. Lecture—Evolution—The meaning of similarity of structure; natural selection; changes in organs; correlation of growth between parts; principles of heredity and fixity of species; tooth forms; definitions and descriptions of the varieties of forms; the typical mammalian dentition; classification of the animal kingdom, with concise descriptions of the typical characteristics of each. One semester. One lecture or recitation a week. Professor Bebb.
- b. Laboratory—Small groups in the Museum for study of specimens.

Histology

PROFESSOR SKILLEN

FRESHMAN YEAR

- a. Lecture-recitation—The construction and the use of the microscope. A study of cell structure and functions; the elementary tissues; histology of the organs; circulatory, lymphatic, alimentary tract, and accessory glands, respiratory system, urinary organs and skin. First semester, two hours a week. Professor Skillen.
- b. Laboratory—A laboratory study of the subjects of the lecture course. First semester. Class divided into sections, each section two two-hour periods a week. Professor Skillen and Dr. Jones.
 - c. Recitations—During laboratory hours.
- d. Lecture-recitation—The Dental Tissues—Enamel; the peridental membranes; periosteum; bone; mucous membranes and other soft tissues of the mouth. Second semester. Two hours a week for ten weeks. Professor Skillen.
- e. Lecture-recitation Embryology Second semester. Two hours a week for five weeks. Professor Skillen.
- f. Laboratory—A laboratory study of the subjects of lecture courses d and e. Second semester. Class divided into sections, each section one three-hour period a week. Professor Skillen and Dr. Jones.
 - g. Recitations—During laboratory hours.

Physiology

PROFESSOR WIGGIN

SOPHOMORE YEAR

- a. Lecture-recitation—The structure of the elementary tissue; the chemical composition of the body; the blood; the circulation of the blood. First semester. Two hours a week. Professor Wiggin and Dr. Wach.
- b. Lecture-recitation—Respiration—Secretion; food digestion; metabolism; nutrition and diet; animal heat; excretion; muscle; nerve physiology; production of voice. Second semester. Two hours a week. Professor Wiggin and Dr. Wach.
- c. Laboratory—Studies of muscles, circulation and respiration. Class divided into sections, each section one three-hour period a week throughout one semester. Professor Wiggin, Dr. Bayard, and Assistants.

JUNIOR YEAR

d. Lecture-recitation—The Central Nervous System—Brain; spinal cord; reproductive organs; development. One hour a week throughout the year. Professor Wiggin and Dr. Wach.

Principles of the Practice of Medicine

PROFESSOR HATTON

JUNIOR YEAR

a. Lecture-recitation—Because of the intimate connection between diseased teeth and systemic disorders, it is essential that dentists be familiar with the elementary principles of the general subject medicine. This subject includes etiology, diagnosis, symptomatology, course, treatment and prognosis of a few of the more typical diseases, as well as those having some relationship to mouth disorders. The mouth symptoms and changes will be especially emphasized. The elementary principles of physical diagnosis will be taught in connection with this course, and ample opportunity given to become familiar with the methods of measuring blood pressure and estimating hemoglobin percentage. One hour a week throughout the year. Professor Hatton.

Materia Medica and Therapeutics

DR. MC CLAIN

SOPHOMORE YEAR

- a. Lecture-recitation—Consideration of the history of the relation of drugs and remedies to dentistry; methods of administration of remedies; action and effect of drugs; dosage; agencies and conditions which modify therapeutic action and physiologic effect; classification of drugs according to their therapeutic action; indications and contraindications for the use of drugs as remedies for pathologic conditions in the mouth; poisons, their antidotes and the antagonistic action of drugs. One hour a week throughout the year. Dr. McClain, Dr. Clark, and Dr. Rhobotham.
- b. Laboratory—The forms, origin and derivation of drugs; a critical study of physical characteristics from samples of about one hundred drugs and their preparations; the principles of prescription writing and of combining drugs in prescriptions; apothecaries' and metric weights and measures, and transposition from one to the other; solubility and preparation of solutions by percentage, and parts by weight and volume. Class divided into sections, each section three hours a week during one semester. Dr. McClain and Assistants.

Bacteriology

PROFESSOR WILLARD

SOPHOMORE YEAR

- a. Lecture-recitation—Principles of Bacteriology—The preparation of culture media; management of laboratory cultures; distinguishing varieties of micro-organisms in laboratory cultures; physiology of micro-organisms; poisons produced by micro-organisms; diseases caused by micro-organisms, particularly those of the teeth and mouth; susceptibility and immunity to diseases. One hour a week throughout the year. Professor Willard.
- b. Laboratory—Preparation of culture media; planting and management of cultures; separation of species in mixed cultures; deriving pure cultures from infected animals; cultures from saliva, from mucous membranes, and from carious teeth; staining, mounting, and microscopic studies; diagnosis of unknowns. Class divided into sections, each section three hours a week throughout the year. Professor Willard and Assistant.

Pathology, General

PROFESSOR HATTON

JUNIOR YEAR*

- a. Lecture-recitation—Etiology of Disease—Disorders of nutrition and metabolism; diabetes; fever; general circulatory disturbances; local hyperemia; local anemia; hemorrhage; embolism; infarction; thrombosis; retrogressive processes; atrophy; infiltrations and degenerations; necrosis; inflammation; progressive tissue changes; neoplasms; infections; granulomata; bacteria, and diseases caused by them. One hour a week throughout the year. Professor Hatton.
- b. Laboratory—Second semester. Class divided into sections, each section three hours a week. Recitations during laboratory hours. Professor Hatton and Dr. Tainter.

Dental Pathology and Therapeutics

PROFESSOR BLACK, PROFESSOR MERRIFIELD

TUNIOR YEAR

- a. Lecture-recitation—Pathology and Treatment of the Gingivae and Peridental Membrane and of the Dental Pulp—Review of the histological structures and physical functions of the tissues, their diseases and treatment. In this course especial attention will be given to the technical procedures and their application in the clinic. Radiographic studies of cases of peridental disease and apical infections, also of root canal fillings, form an important feature of this course. About 17,000 radiographs were taken for school patients last year. Oral prophylaxis and mouth hygiene—preventive measures which should be employed by dentist and patient—will be presented. One hour a week throughout the year. Dr. Merrifield and Dr. Lundquist.
- b. Lecture-recitation—Pathology and Treatment of the Dental Pulp—Review of histological structure and functions; hyperemia and inflammation, obtunding sensitive dentin; devitalization; removal; treatment of canals; root filling; aseptic technique; alveolar abscess;

^{*}In 1921-22, this course will be included in the schedule of Sophomores taking the special four-year course, who entered in 1920 with a year of Liberal Arts; in 1922-23 this course will be included in both Sophomore and Junior schedules, and thereafter in the Sophomore schedule only.

chronic osteitis; necrosis of bone; studies of antiseptics and their effect on the tissues; bleaching teeth. One hour a week throughout the year. Professor Willard.

- c. Laboratory—Histo-pathological Studies of the Teeth and Their Investing Tissues—The changes which occur in hard tissues in the various dystrophies—atrophy, mottled teeth, white enamel, etc.; in dental caries, secondary dentin and excementosis; also the changes in the pulp in inflammation and the various forms of calcification; and in the peridental tissues in chronic alveolar abscess and chronic pericementitis. One period of three hours a week during one semester. Professor Hatton.
- d. Clinical Practice—Junior students are required to make one hundred points in pulp treatments and one hundred points in peridental treatments, in the clinic.

SENIOR YEAR

- e. Lecture-recitation—Pathology of Both the Hard and Soft Tissues of the Teeth—Studies of the dystrophies of the enamel, of erosion, abrasion and dental caries; of the diseases and treatment of the gingivae and peridental membranes, and of the dental pulp. One hour a week throughout the year. Professor Black.
- f. Seminar-Theme—Review of the literature of dental pathology and studies in the Research Laboratory. In this course selected groups of articles in the periodical literature and subjects in books will be assigned to small groups for seminar study. Groups will also be assigned to the Research Laboratory. Each week a short theme will be presented by a member of the class and discussed by others. One hour a week throughout the year. Professor Black.
- g. Clinical Practice—Senior students are required to make two hundred and fifty points in pulp treatments and two hundred and fifty points in peridental treatments in the clinic. Radiographic studies of peridental disease and apical infections, also of root canal fillings, will be an important part of the care of cases in the clinic.
- h. Peridental Membrane Clinic—Each section, one hour a week for five weeks. Professor Black and Dr. Merrifield.

Mouth Hygiene; Oral Prophylaxis

PROFESSOR BLACK

SOPHOMORE YEAR

a. Lecture-recitation—This course will include a presentation of the general problems involved in disease of the oral cavity, with a discussion of means of prevention. The various methods of maintaining mouth cleanliness will be discussed, and the technic will be given in detail. Preventive measures which may be employed by both dentist and patient. Mouth hygiene technique. The relation between operative and prosthetic procedures to the diseases of the soft tissues. Teaching of mouth hygiene in public schools, and dental service in public schools and eleemosynary institutions. Second semester. One hour a week. Professor Black.

Operative Dentistry

PROFESSOR GETHRO, PROFESSOR WILLARD, PROFESSOR BLACKWELL,
PROFESSOR RAY

DENTAL ANATOMY, OPERATIVE TECHNICS

FRESHMAN YEAR

- a. Lecture-recitation Descriptive Anatomy of the Human Teeth—Nomenclature. Studies of the maxilla and mandible, with especial attention to the surgical anatomy. First semester. One hour a week. Dr. Ray, Dr. Dix and Dr. Henderson.
- b. Laboratory—Studies of the forms of individual teeth; carving the tooth forms in bone or ivory; dissections and studies of the internal parts—pulp chambers and root canals. First semester. Class divided into sections, each section two three-hour periods a week. Dr. Ray, Dr. Dix, Dr. Tillotson and Dr. Henderson.
- c. Lecture-recitation—Instruments and Instrumentation A study of instrument forms, instrument construction, and the adaptation of instruments to the excavation of cavities. Cavity Nomenclature—A study of the location of cavities in extracted teeth, of the forms of prepared cavities, and of the use of instruments in their preparation. Oral Prophylaxis Studies of instruments and manipulation. Second semester. One hour a week. Dr. Ray, Dr. Dix and Dr. Henderson.
- d. Laboratory—Study of instrument forms; a set of forty-eight excavators made to millimeter scale in brass; preparation of cavities

in extracted human teeth, ivory or bone. Second semester. Class divided into sections. Each section two three-hour periods a week. Dr. Ray, Dr. Dix, Dr. Tillotson and Dr. Henderson.

OPERATIVE DENTISTRY

SOPHOMORE YEAR

- e. Lecture-recitation—Technical Procedures in Cavity Preparation and in Filling Teeth—Cavity nomenclature; cavity preparation; principles, instruments and appliances, and instrumentation; cavity preparation by classes of cavities. Filling materials; instruments and instrumentation, physics of filling operations, finishing fillings. Filling with gold foil, gold inlays, amalgam, cements, gutta-percha. Exposure and removal of the dental pulp. Preparation and filling of root canals. Two hours a week throughout the year. Professor Blackwell, Dr. Wylie, Dr. Meyer and Dr. Root.
- f. Laboratory—Preparation of cavities and manipulation of the various filling materials. Pulp treatment and the filling of root canals. Instrumentation in oral prophylaxis and in the treatment of diseases of the periodical membrane. These operations are performed with extracted human teeth, placed in position in the jaws of manikins, the conditions being as nearly like those met with in actual practice as possible. One three-hour period a week throughout the year. Dr. Meyer and Dr. Root.

JUNIOR YEAR

- g. Lecture-recitation—Review of Technical Procedures in Filling Teeth—The Hard Tissues of the Teeth—Studies of the dystrophies of the enamel, of erosion, abrasion, and dental caries; caries of enamel; caries of dentin; inception and progress of dental caries; conditions of the beginning of dental caries; systemic causes of dental caries; susceptibility from and immunity to dental caries; vital phenomena in dental caries; hyperesthesia of dentin; treatment of dental caries; curative effect of fillings; selection of filling materials. First semester. One hour a week. Professor Gethro.
- h. Lecture-recitation—The force used in mastication in relation to operative procedures; treatment of dental caries; management of cavities by classes; "extension for prevention" and its limitations; esthetic considerations; the deciduous teeth, their pathology and treatment; the childhood period of the permanent teeth; management of patients. Second semester. One hour a week. Professor Gethro.

i. Operative Clinic—Open to Junior students eighteen hours a week during the entire year. Operations amounting to one hundred points required in gold fillings, one hundred points in gold inlays and one hundred points in amalgam fillings. Credit points are given for fillings ranging from one to ten points. The location of the cavity, the operative difficulties encountered, and the excellence of the completed operation determine the amount of points earned in each case. Professor Black, Professor Gethro, Professor Willard, Professor Blackwell, Dr. Wylie, and Assistants.

SENIOR YEAR

- j. Seminar-Theme—Review of the literature of operative dentistry. For this course selected groups of articles in the periodical literature and subjects in books will be assigned to small groups for seminar study. Each week a short theme will be presented by a member of the class and discussed by others. One hour a week throughout the year. Professor Blackwell.
- k. Operative Clinic—Open to Senior students daily throughout the year. Operations amounting to two hundred and fifty points are required in gold fillings, two hundred and fifty points in gold inlays and two hundred and fifty points in amalgam fillings. Professor Black, Professor Gethro, Professor Willard, Professor Blackwell, Dr. Wylie, and Assistants.
- 1. Special Operative Clinic—Each section one hour a week for five weeks. Professor Gethro.

Prosthetic Dentistry

PROFESSOR RIDGWAY

FRESHMAN YEAR

- a. Lecture-recitation—Prosthetic Technics—This course covers the fundamental principles of denture construction and crown and bridge work, and accompanies the laboratory course. One semester. Professor Kellogg.
- b. Laboratory—Impression taking, model constructing, occluding, waxing, flasking; packing, vulcanizing and finishing partial and full artificial dentures. Construction of crowns and dummies, all metal, and metal and porcelain; assembling individual crowns and dummies to form bridges. Class divided into sections, each section nine hours a week throughout the year. Dr. Kellogg, Dr. Dalitsch, Dr. Buttery, Dr. Seise, and Dr. Wedell.

SOPHOMORE YEAR

c. Lecture-recitation—Metallography—A descriptive course on the nature and physical properties of metals, especially those used in dentistry, with fundamental principles of their uses; the manipulation of metals, swaging, annealing, solders and soldering, welding, tempering. First semester. One hour a week. Professor Ridgway.

d. Laboratory—Construction of dies and counter dies; swaging metal bases of German silver; attaching teeth by soldering and by vulcanite; construction of crowns and dummies, all metal, and metal and porcelain; assembling individual crowns and dummies to form bridges. First semester. Class divided into sections, each section nine hours a week. Dr. Kellogg, Dr. Dalitsch, Dr. Buttery, Dr. Seise and Dr. Wedell.

e. Lecture-recitation—The physical properties of plaster of Paris and other materials employed in prosthesis. Muscles of mastication; force of the bite; movements of the lower jaw; natural arrangement and occlusion of artificial teeth. Second semester. One hour a week. Professor Ridgway.

f. Laboratory—Construction of full metal and partial metal dentures, with teeth attached by soldering and by vulcanite; construction and application of clasps to partial dentures; advanced work in crowns and bridges. Second semester. Class divided into sections, each section nine hours a week. Dr. Kellogg, Dr. Dalitsch, Dr. Buttery, Dr. Seise and Dr. Wedell.

JUNIOR YEAR

- g. Lecture-recitation—Review of technique principles outlined in previous courses; application to practical operations in the clinic. The physical properties of plaster of Paris and other materials employed in prosthesis. Muscles of mastication; force of the bite; movements of the lower jaw; natural arrangement and occlusion of artificial teeth. One hour a week. Professor Ridgway.
- h. Laboratory—Cast aluminum base dentures; celluloid dentures; banded Logan crowns; baked porcelain crowns; porcelain bridges; continuous gum dentures. Dr. Kellogg, Dr. Dalitsch, Dr. Oynes and Dr. Silberhorn.
- i. Prosthetic Clinic—Each student is required to carry to completion for patients a number of practical cases, representing each of the various classes of prosthesis, amounting to at least one hundred points in crowns and bridges and one hundred points in denture construction. Dr. Methven, Dr. Sayre and Dr. Tanner.

SENIOR YEAR

- j. Lecture-recitation—Summary of recent methods and appliances; application of porcelain in prosthesis; porcelain crowns; porcelain bridges, full porcelain dentures; gold casting applied to crowns and bridges; removable bridges; repairs to crowns and bridges; review of anatomical occlusion; cleft palate appliances, splints for fractures. One hour a week. Professor Ridgway.
- k. Seminar-Theme—Review of the literature of prosthetic dentistry. For this course, selected articles in the periodical literature and subjects in books will be assigned to small groups for seminar study. Each week a short theme will be presented by a member of the class and discussed by others. One hour a week throughout the year. Professor Ridgway.
- 1. Prosthetic Clinic—Practical pieces of prosthetic work of all varieties made and fitted for patients in the clinic. The preparation of roots for crowns and the abutments of bridges; making and setting crowns and bridges. The minimum requirement is two hundred and fifty points in crowns and bridges, and two hundred and fifty points in dentures. Dr. Methven, Dr. Sayre and Dr. Tanner.

Oral Surgery

PROFESSOR GILMER AND PROFESSOR POTTS

JUNIOR YEAR

- a. Surgical Anatomy—In small groups, sixteen hours. Dr. Freeman.
- b. Extraction Clinic—Each section two hours a week for five weeks. Dr. Freeman.

c. Radiology—Lectures and practical instruction in radiographic room. Second semester. Two hours each week. Dr. Christiansen.

- d. Lecture—Anesthetics—Historical review; state of the patient; nature of operation; choice of anesthetic; prolonged dental operations; circumstances of administration; examination of patients; general anesthetics, local and regional anesthetics, dangers of anesthesia; ether, chloroform, nitrous oxid; nitrous oxid and oxygen for anesthesia and analgesia; conductive anesthesia. One semester. One hour a week. Professor Hatton.
- e. Clinical Demonstrations of Nitrous Oxid and Novocain Anesthesia—Daily in the extracting clinic. Dr. Lundquist and Dr. Clark. Each Junior student is required to make one hundred points in surgical treatments and one hundred points in extractions.

SENIOR YEAR

- f. Lecture-recitation—Surgical bacteriology; inflammation; suppuration; wounds; hemorrhage; necrosis; chronic osteitis; disease of the maxillary sinus; resection of roots; tetanus; ankylosis; arthritis; facial neuralgia; fractures; dislocations; extraction of teeth; malposition of third molars; impacted teeth; replantation, transplantation, and implantation of teeth; cleft palate and harelip; affections of the lips, tongue, and mouth; tumors; odontomes; ranula; cysts; aneurisms. One hour a week throughout the year. Professor Gilmer and Professor Potts.
- g. Seminar-Theme—Review of the literature of oral surgery, with especial attention to the developments of the European War in maxillo-facial surgery. For this course, selected groups of articles in the periodical literature and subjects in books will be assigned to small groups for seminar study. Each week a short theme will be presented by a member of the class and discussed by others. One hour a week throughout the year. Dr. Freeman.
- h. Surgical Clinic—Two hours a week throughout the year. Professor Gilmer, Professor Potts, Dr. Meyer, Dr. Freeman and Assistants. Nurses from St. Luke's Hospital. The after-treatment of cases will be by students, under direction of Professor Gilmer.

Each Senior student is required to make two hundred and fifty points in surgical treatments.

- i. Special Surgical Clinic—Each section, one hour a week for five weeks. Dr. Meyer.
- j. Clinic in the Extraction of Teeth—Special extraction clinic for each section, one hour a week for five weeks. Dr. Freeman, Dr. Lundquist, Dr. Clark. Each Senior student is required to make two hundred and fifty points in extractions.
- k. Clinical Demonstrations of Nitrous Oxid and Novocain Anesthesia—Daily in extracting clinic. Dr. Lundquist, Dr. Clark and Dr. Christiansen.
- l. Radiology—Daily clinical instruction. Dr. Christiansen and Assistants.

Orthodontia

PROFESSOR SELLERY

SOPHOMORE YEAR

a. Laboratory—Constructing and tempering taps and dies of steel; drawing wire and tubing suitable for the construction of orthodontia appliances. Impressions and models. Making of pinch bands, clamp bands and retainers; application of these to models on the manikin. First semester. Three hours a week. Dr. McClain.

JUNIOR YEAR

- b. Lecture-recitation—General Principles in Orthodontia—Taking impressions and making models; fitting of appliances. Causes of malocclusion; principles of treatment; methods of retention. Regulating appliances. Anchorages, jack screws, levers, traction screws, expansion arch and combinations, split plates, reciprocal anchorages, retention. Illustrated with models, with movable teeth and enlarged appliances. Stereopticon views, illustrating progressive regulation and final fixation. One hour a week throughout the year. Professor Sellery and Dr. Buckley.
- c. Clinic—Open to students throughout the year for the correction of cases in practice. Each Junior student is required to make one hundred points in orthodontia. Professor Sellery and Dr. Buckley.

SENIOR YEAR

- d. Lecture-recitation Occlusion and Facial Art Etiology, classification, diagnosis of malocclusion. The alveolus and alveolar processes, the peridental membranes, and use of models. First semester. One hour a week. Professor Sellery and Dr. Buckley.
- e. Clinic—Open to students throughout the year for the correction of cases in practice. Each member of the class is required to make two hundred and fifty points in orthodontia. Professor Sellery and Dr. Buckley.
- f. Orthodontia Clinic—Each section one hour a week for five weeks. Professor Sellery.

Dental Jurisprudence and Ethics

PROFESSOR NOYES

SENIOR YEAR

a. Lecture—Ethics—Elementary principles of ethics; professional ethics; state laws relating to dentistry; Illinois dental law; dental jurisprudence; general review. One semester, one hour a week. Professor Noyes.

Dental Economics

DR. O. U. KING

SENIOR YEAR

a. Lecture—Dental Economics—This course embraces practice building, methods of obtaining and retaining patients, business relations between the dentist and his patients, fees, accounts, records of operations, presentation and collection of accounts, methods of economy in the conduct of an office. One semester, one hour a week. Dr. O. U. King.

Technical Composition

PROFESSOR DENTON

SOPHOMORE YEAR

a. Long Theme—The preparation of professional papers; the use of libraries, bibliographies, footnotes. Second semester, one hour a week. Professor Denton.

JUNIOR YEAR

b. Long Theme—Each member of the class will prepare one long theme compiled from the periodical and other dental literature. Professor Denton.

SENIOR YEAR

c. Seminar-Theme—All reviews prepared by members of the class for the seminars in oral surgery, dental pathology, prosthetic dentistry and operative dentistry will be criticized before they are read before the class. Conferences with the student essayists and discussers. Professor Denton.

Register of Students, 1920-1921

SENIORS

Aron, Eugene SIllinois
Barker, Graham Frank Michigan
Bell, É. CyrilIndiana
Blachly, D. WIndiana
Brady, Harold JamesWisconsin
Chase, Ralph RMichigan
Chrt. GeorgeIllinois
Chrt, GeorgeIllinois Collins, Joseph W., Jr. South Dakota
Dang, Tai Hee
Dewey, Walter MMichigan
Dybdal, Arthur EMinnesota
Garrison, NelsonIllinois
Gates, Raymond JohnIllinois
Gifford, FrankMissouri
Golden, Harold Miller Florida
Greenburg, Julius NelsonIllinois
Gunn, John Harvey Michigan
Hall, Edwin EOhio
Hall, Edwin EOhio Harris, Richard VMinnesota
Hax, George WIllinois
Hay, Robert BMaryland
Highum, AlvinMinnesota
Howell, Raymond LIndiana
Hulvey, LeoIllinois
Hulvey, LeoIllinois Johnson, Arthur LeeSouth Dakota
Johnson, Walter RalphIllinois
Kelly, Harley EdmundIowa

Larsen, ReubenSouth Dakota
Lasater, R. LandessTennessee
Leininger, Clarence WIllinois
Marks, ArthurAlabama
Mathews, Harry WWashington
Mazurek, Joseph S Wisconsin
McKee, Dale LSouth Dakota
Moore, Carl LKansas
Mumber Marwell C Torse
Murphy, Maxwell CTexas
Nicholaisen, Wm. HIllinois
Nishimura, Hideichi Hawaii
Peacock, Lawrence RNebraska
Peters, Leonard AIowa
Poliak, Edward AColorado
Quinlan, Leo JeromeIndiana
Rafish, Samuel MMontana
Romine, Neva LouiseKansas
Rubens, Sidney LeonIllinois
Schauf, Edward JohnIllinois
Steffes, Clarence LIllinois
Stephan, Harry CIndiana
Swanson, Edgar WalfredIndiana
Taggart, Eleanora EthelIllinois
Toraason, Hiram WWisconsin
Watkins, Vertice OArizona
Weiss, Leslie LisleIndiana
Woods, Harold JIllinois
J

JUNIORS

ioko
Frerichs, Arthur WSouth Dakota
Grahn, Earl G. WIllinois
Handler, E. DavidIllinois
Hansen, Ellen GurineIllinois
Hansen, Frederik LIllinois
Hatcher, Oliver P Tennessee
Hill, Lloyd BKansas
Hockings, Robert Burnell Michigan
Howard, Gordon MIllinois
Isay, Morton GIllinois
Jostes, Benedict HIllinois
Kaep, Henry JIowa
Kalb, Thaddeus FIndiana
Kobrzynski, Harriet EIllinois
Kopperud, WilliamNorth Dakota
Kraft, DavidIndiana
Moe, HaroldSouth Dakota

Munn, James ACanada
Newbury, Wallace JWisconsin
Nortell, HarryIllinois
O'Hara, John Sterling Michigan
Paradis, David AMichigan
Pendergast, William B Illinois
Peters, Wilfred SIllinois
Polisky, JacobIllinois
Prince, George MIllinois
Probst, Edmund AloysiusIndiana
Rappaport, BernardIllinois
Reese, H. CortlandIllinois
Ringland, Kenneth WIllinois
Rose, Foraker LVirginia
Runyan, George WIndiana
Scher, JacobIllinois
Schumaker, James RobertIllinois
Seim, Roy HWisconsin
Serritella, WilliamIllinois
Shissler, F. GIllinois

Silver, SaulIllinois
Skebelsky, Martin SIllinois
Skrentny, MatthewIndiana
Smith, Geo. LCanada
Smith, J. RobertColorado
Specter, Wilmont EIndiana
Sprunt, William HIdaho
Stephenson, Lindale Van. New York
Sturdavant, ForestIllinois
Thompson, David JohnIllinois
Wagner, J. HaroldIllinois
Wanamaker, Frank H. Washington
Wasson, Joseph SIllinois
Wheale, John TIndiana
Whitaker, Roy JCanada
Williams, G. HewettOklahoma
Williams, Roger SWisconsin
Wood, Norton JMichigan
Wright, KatieTennessee
Zimmer, William PIllinois

SOPHOMORES

Adams, William MWashington
Anderson, L. PUtah
Anderson, T. OIllinois
Balbach, George JacobIllinois
Balhatchett, George WIllinois
Bank, Carl HMichigan
Barlow, William AndersonIllinois
Baxter, Glenn BIowa
Bayne, Neil EMontana
Benson, William HIllinois
Bentz, Allan
Berg, Stanley Hjalmer. North Dakota
Bernheim, Max GIllinois
Bettenhausen, L. GIllinois
Binford, HughAlabama
Boone, Glen CIllinois
Boucher, OrlandoIllinois
Bowker, Harry CIllinois
Boyd, John BedfordIllinois
Brandser, Robert Wisconsin
*Brennan, John EIllinois
Brown, Daniel PIllinois
Brown, Donovan WardIndiana
Bruce, Jack Edward, Jr Wisconsin
Bruce, Ray
Bult, LawrenceIllinois
Burke, Joe FSouth Dakota

Callahan, W. FMontana
Cameron, Charles ACanada
Campbell, John Nelson
North Dakota
Caplan, JuliusIndiana
Casewell, Cuthbert CCanada
Chadwick, Sam W
Washington, D. C.
Chisholm, Reginald HVirginia
Clearwater, Edgar BIowa
Cohn. Hymen IIllinois
Cohn, Hymen JIllinois Collins, D. HSouth Dakota
*Connell, Francis MIowa
Corrin, Roger JMichigan
Crandall, Myron Francis. Minnesota
*Craner, Herbert EUtah
Cunat, Miles JIllinois
Curtis, NathanielArizona
Dally, Michael HenryIllinois
Deahl, ElmerIllinois
Delph, DennisIndiana
Denison, William Russell. Indiana
Diehl, Val CSouth Dakota
*Dingle, Roy FMinnesota
Dobson, Andrew EIowa
Donovan, Leo JIllinois
Drummond, Harold CMichigan
Diaminona, Iluroid C

^{*}Matriculated, but not in attendance.

Dunn, Howard GIowa
Dunn, Howard GIowa Dunsworth, Leon BCanada
Ericson, Marvin GNorth Dakota Evans, Phillip SIdaho
Evans, Phillip SIdaho
Fellows, Earl Wiley Illinois Fisher, Wilfred E North Dakota Foss, William J Illinois Fults, Floyd Z Indiana Gaul, Edward C Illinois Gidley, Gerald H Indiana Cillaria Wolfer Israel
Fisher Wilfred E. North Dakota
Foss William I Illinois
Fults. Floyd ZIndiana
Gaul. Edward CIllinois
Gidley, Gerald HIndiana
Gillespie, waiter fames
Gillmeister, Benjamin MIllinois
Gilroy, John J
Gierset, Maurice JIowa
Gleave, Leo EUtah
Gray, CharlesMontana
Gray, Emory SpeerIllinois
Gleave, Leo E Utah Gray, Charles Montana Gray, Emory Speer Illinois Grundy, George Benj Oklahoma Gunther, Frank M Illinois
Gunther, Frank MIllinois
*Gevirtz, JasperIllinois
Hammerschmidt, E. CIllinois
Hadden, Gilbert EIllinois
Halbeisen, Harold J. North Dakota
Hamilton, Harold F Washington
Hanson, Clarence AMinnesota
Gunther, Frank M
Havelka, RudolphIllinois
Herse, Richard LNebraska
Hess, Elmer RIllinois
Hines, Hubert BIllinois
Hoag, Eugene EIllinois
Hines, Hubert B
Hoxsey, Floyd LIllinois
Huffman, Luverne M. North Dakota
Hulwitz, Albeit Elvin. Washington
Hutt, Spence AtwellIllinois James, Chas. SMassachusetts
James, Chas. SMassachusetts
Jackson, Milon B
Jennings, Ovid JIndiana
Jensen, L. WallaceUtan
Johnson, Meivin
Johnson, Otto M
Kern, Roy AntonIllinois
Vineman George H Love
Killip, Merrill H Illinois Kinsman, George H Iowa Kolling, William Illinois LaCount, Paul Indiana Laederach, Walter Edward .Illinois
LaCount Paul Indiana
Laederach Walter Edward Illinois
Lahr, Elven ScottIndiana

Lanser, Matthew T.....Iowa Lawson, Ralph Jack.....Ohio Lewis, William E......Missouri Lindstrom, CarlIllinois Livingstone, Donald M.... Canada Lynch, William J.....Indiana Lyons, Vaughan D.....Idaho Lyons, Wayne Charles.....Illinois Magee, Roy M.....Oklahoma Maika, Henry Frederick... Nebraska Mastrud, Albert F.... North Dakota Mathews, Oliver S......Illinois McDaniel, Donald J.....Illinois McEwen, Robert A.....Illinois McNicol, Thomas K.....Canada Meese, Raymond E......Indiana Miller, Elmer G..... Missouri Miller, Floyd H.....Illinois Minshall, Lawrence K...Wisconsin Mudra, James, Jr......Illinois Murray, Horatio S.....Wisconsin Neperud, Marvin S..... Wisconsin New, HarlandIllinois Nordlie, Arndt B.....Illinois Northcutt, ClaudeOklahoma Olson, Reuben M.....Illinois Oltman, Harold C.....Missouri Pacey, WalterIllinois Pafford, Ernest M.....Arizona Pearson, Herschel E.....Idaho. Peterson, Clarence H.....Illinois Peterson, Clyde A....South Dakota Plekenpol, Lester Jerome. Wisconsin Poliak, Meyer S......Colorado Powers, John R.....Illinois Quiter, R. J. Nebraska Rahn, Walter G. Illinois Reeder, Daniel M.....Illinois Ringland, Raymond R.....Illinois Robbins, William M. North Dakota Roberts, Albert Lincoln....Illinois Roe, ArthurIllinois Rose, William Alexander. Kentucky Rubenstein, Obbie Abraham. Canada Ruggles, Leonard B.....Michigan Ryan, Leonard L.....Canada Sackhein, DavidIllinois Sanderson, Leon T......Canada Schaefer, Roy C.....South Dakota Schmidt, William George F.Canada

^{*}Matriculated, but not in attendance.

Schow, WillesIdaho Scroggin, Guy FIllinois
Scroggin, Guy F Illinois
Seaborg, Axel AIllinois
Shackelford, J. GordonArizona
Sharp, Baxter ReedIllinois
Channel Clade C Illinois
Sheppard, Clyde CIllinois
Siljan, SigurdSouth Dakota
Skuse, James BIllinois
Smith, Wilbur SIllinois
Snyder, RobertWisconsin
Soffel, Quintin IIllinois
Spencer, HarwoodCanada
Spencer, Mark CIowa
Steiner, Charles JIndiana
Stern, HenryIllinois
Stevenson, George AIllinois
Strong, LawrenceIllinois
Sugar, Milton HarryIndiana
Sutherland, H. RossCanada
Swindell, Merle RexMichigan
Taylor, Ray HIllinois
Teaff, James WOhio
Thompson, Laurence BIllinois

Thompson, Lloyd CNorth Dakota
Tittle, Felix SIllinois
Townsend, Gerald WIllinois
Touzel, MervynCanada
Ullestad, Rolf JIllinois
Vangsnes, OlafIllinois
Webb, William MIllinois
Weekes, W. EdwardNebraska
Wellenstein, Melchior Minnesota
Wellington, Charles WCanada
Wescott, R. LIllinois
Westphal, Fred MIllinois
Wiesjahn, AlvinIndiana
Williams, RussellIllinois
Willson, Kenneth FNorth Dakota
Wisnow, HelenIllinois
Wojniak, Jos. SIllinois
Wood, Gary RIndiana
Wright, Thos. RIowa
Wurth, Albert JOhio
Zagers, EdwardMichigan
Zee, T. YChina

FRESHMEN

Adams, Samuel P., JrIllinois
Ahlers, Fred WIllinois
Altenberg, Nathan HIllinois
Anderson, Carl Orlando
South Dakota
Anderson, Carl WilliamIllinois
Anderson, Earl Francis
North Dakota
Bailen, Albert AIllinois
Baldridge, Roy RIllinois
Barkdull, StewartIdaho
Bates, Charles WilliamIllinois
Belinski, John LIllinois
Bellagrotzky, EmanuelIllinois
*Bennesen, Harris ACalifornia
*Bergh, Arne OswaldIllinois
Berman, HaroldIllinois
Berman, Sidney DIllinois
Berry, Arthur LIllinois
Betzer, Chester HaroldIllinois
Bigelow, Rolland Arlington
Michigan
Bill, Edith HMaryland
*Birdsley, Pryce CleoNebraska
Director, Tryce Cicorrilleoraska

Blattberg, Benjamin	Illinois
Bloomberg, Samuel L	Texas
Blumenthal, Morris	Indiana
Boardman, George	Illinois
Bodfish, S. Burr	Michigan
Boelke, Clarence Henry.	Minnesota
Borg, Alfred L	Illinois
Boynton, Eliot Robins	Idaho
Brandt, Lloyd	Minnesota
Brennan, James F Pe	nnsylvania
Brown, Frank J	Indiana
Brozowsky, Sam	Indiana
Buchanan, William A	Illinois
Bunta, Joseph Douglass.	Illinois
Bush, Orville John	Illinois
Butkin, Max R	Illinois
*Carlson, Walter D	Minnesote
Carnahan, Chester Louis	
Chadovich, Peter	
*Chambers, W. J	
Champ, Charles Clevelan	d
*Chaun, Kwok Wing	China

^{*}Matriculated, but not in attendance.

Chipman, Malcolm Richard
Churchill, Lewis DIllinois
Churchill, Lewis DIllinois
Cibock, Charles EmilIndiana
Cibock, Lewis MartinIndiana
Cibock, Lewis MartinIndiana Cisar, George EdwardIllinois
Clark, Thomas AMontana
*Cohon Isadore I Indiana
Cohen Isador S Illinois
Colbiornsen Kield S Canada
Conarty Ansel Indiana
Cohen, Isador SIllinois Colbiornsen, Kjeld SCanada Conarty, AnselIndiana Cooper, Herbert William Australia Cooper, John EdmondCalifornia
Cooper John Edmond California
Crum, Arthur LIowa
Cruz, B. DomingoIllinois
*Curry Tuke F Montana
*Curry, Luke FMontana Dahl, Rolf HSouth Dakota
*Dahlin, David HMinnesota
Damaran Lagan D. Arizana
Dameron, Logan DArizona Davis, John W., JrTexas
Davis, John W., Jr
Davis, Miles Dewey, Jr. Arkansas Davis, Stanley E Wisconsin *Dempsey, J. Edward Canada DeRose, Amedeo Wisconsin
*Davis, Stanley E Wisconsin
D. D. A. A. L. Ward Canada
Disking Edward Turner
Dickinson, Edward Turner
Montana
Dillas Taisk Wilsonsin
Dickinson, Edward Turner Montana Dillon, Leigh Wisconsin
Dillon, Leigh Wisconsin Dobbs, J. Lowry Ohio
*Dobbs, J. Lowry
*Dohner, Earl CNebraska Donahue, Joseph AIowa Donlevy, WebsterIllinois Dowdall, Robert Oliver. Minnesota Dowling, Claire Fredric. Wisconsin
*Dohner, Earl CNebraska Donahue, Joseph AIowa Donlevy, WebsterIllinois Dowdall, Robert Oliver. Minnesota Dowling, Claire Fredric. Wisconsin
*Dohner, Earl CNebraska Donahue, Joseph AIowa Donlevy, WebsterIllinois Dowdall, Robert Oliver. Minnesota Dowling, Claire Fredric. Wisconsin
*Dohner, Earl CNebraska Donahue, Joseph AIowa Donlevy, WebsterIllinois Dowdall, Robert Oliver. Minnesota Dowling, Claire Fredric. Wisconsin
*Dohner, Earl CNebraska Donahue, Joseph AIowa Donlevy, WebsterIllinois Dowdall, Robert Oliver. Minnesota Dowling, Claire Fredric. Wisconsin
Dobbs, J. Lowry

Fishbein, Louis HIllinois
Fisher, Max PierceSouth Dakota Fitzgerald, Percy AIllinois
Fitzgerald, Percy AIllinois
Elaten Cilbert W. Minneseta
Fleming Thomas Flden Canada
*Foote I C Ir Canada
*Foster Jasper F. Minnesota
Fleming, Thomas EldenCanada *Foote, J. C., JrCanada *Foster, Jasper EMinnesota Foutz, LeslieUtah Francis, Harry BIllinois Frangenheim, RaymondIllinois Friedman, Maurice HIndiana
Francis, Harry BIllinois
Frangenheim, Raymond Illinois
Friedman, Maurice HIndiana
*Fugle, James BIllinois Fuqua, John WilliamIllinois
Fugua, John William Illinois
Genser, Arnold AIllinois
Gevirtz, Sydney EIllinois
Ghent, Charles LeslieCanada
Gevirtz, Sydney EIllinois Ghent, Charles LeslieCanada Gibson, Arthur JamesMichigan
Gleich, Gordon JMichigan Goldberg, DavidIllinois
Goldberg, DavidIllinois
Coldbranson Kent I IItah
*Goldin, SolomonIllinois
Gordan, Samuel GeorgeIllinois
Grandle, H. MarionKansas
Graves, Cledith OMichigan
*Goldin, Solomon Illinois Gordan, Samuel George Illinois Grandle, H. Marion Kansas Graves, Cledith O Michigan Greenebaum, Moe New York
Groskie, Joseph Illinois Guerrero, James Illinois Guthridge, John R. Canada Gysin, Elmer Wisconsin Haag, Ivan M., Jr Indiana *Hamilton, Willard N.
Guerrero, JamesIllinois
Guthridge, John RCanada
Gysin, ElmerWisconsin
Haag, Ivan M., JrIndiana
*Hamilton, Willard N
North Dakota
North Dakota Hanson, AlvinWisconsin Hanson, Edward North Dakota
Hanson, EdwardNorth Dakota
Hanson, Henry OWisconsin Hanson, John Tillman. North Dakota
Hanson, John Hillman. North Dakota
Harmke, CarlIllinois *Harris, Francis SMichigan
*Harrison Starling New James
*Harrison, SterlingNew Jersey Haskins, Virgil LovingMichigan
*Haughton Walter A Canada
Haven S Rush Ir Illinois
Headen Leon W Alahama
Hedenschoug Wright Illinois
Heininger Sylvan B Illinois
*Haughton, Walter A
Henes, Raymond Arthur, Michigan
Henderson, Harvey Joseph Indiana
Henderson, Harvey Joseph Indiana Henninger, George Chester Illinois
Hippaka, Eino Gabriel. Minnesota

^{*}Matriculated, but not in attend ance.

Hoskins, George Alexander. Canada	Lombardo, Anton PalmerIllinois
Horwitz, Max SIllinois	Lord, DeForest Dodge. New Mexico
*Houvener, Harold LMichigan	Lovitt, Benjamin IIllinois
	Lovitt, Benjamin 1
Hubbell, Maurice Lavern. Michigan	*Lundberg, George William
Hultquist, Harry FNew York	*Malawsky, Alexander HIllinois
Humpidge, Walter CIllinois	*Malawsky, Alexander HIllinois
*Huntbatch, Harry ThomasIowa	Malloy, Floyd JMontana
*Ion, Charles Herbert. North Dakota	Malwitz, Roland KUtah
*Iseberg, MeyerIllinois	Marcero, Clayton JohnMichigan
Jackson, James OPennsylvania	Marshall, Hugh BWisconsin
*Jackson, Marque WNew York	
*Jackson, Warque WNew Tork	Mast, Otto LIndiana
*Jensen, Ray	Mathews, Edwin CarlIndiana
Jindrich, ErvinIllinois	Matteson, C. D
Joallier, Constantin JGreece	McCaskill, James WGeorgia
*Johnson, Harry CKentucky	*McCrary, Harry BOhio
Johnson, Melvin AIndiana	McDermott, Joseph Myron
Johnson, Nels Kenneth. South Dakota	Wisconsin
Kanute, Charles Malcolm	McElwain, J. RobertWisconsin
Wisconsin	McNamara, Lyle W. South Dakota
Karnick, Ralph Leonard	
North Dakota	*Miller, Nathaniel PMichigan
	Minn, LouisIllinois
Kella, JosephIllinois	Misher, Kenneth WilliamIllinois
Kelley, James JosephIllinois	*Morgan, George D. Pennsylvania
Kelly, CharlesWisconsin	Morris, Edwin Bleakley Illinois
Kennedy, William LAlabama	Morrison, Gordon WCanada
Kidder, WayneMichigan	Moyes, William SUtah
Kitzmiller, Elmore Franklin. Illinois	Murphy, KennethIowa
Klein, Henry CIndiana	Nakamura, Masao
Klein, NathanNew York	Nelson, Henry WIllinois
Knauss, Harry DanielNebraska	Newell, RobertNebraska
Koenigsberg, WalterIllinois	Newman, Caesar EIllinois
Korssell, Harold MIllinois	Newman, MarcusIllinois
Kozlow, Herman EdgarMichigan	Newman, MeyerIllinois
Krapp, Roy PaulIllinois	Nichala Dannard Erran Illini
Kuchinky, Michael JOhio	Nichols, Raymond EugeneIllinois
Kuchinky, Wichael J	Nordberg, HarryUtah
Kuchler, Frank George, Jr. Illinois	Nussdorfer, Elmer Chris. Michigan
Kuhn, Harry FerralIowa	O'Brien, GeorgeIllinois
Lahr, E. GlennIndiana	O'Keefe, John Joseph. North Dakota
Lane, Alvan HIllinois	Olson, Frank BIllinois
Lane, John FrederickCanada	*Orendorff, Allen GlennIllinois
Larkey, Clarence William. Michigan	Ong, GeorgeIllinois
*Larson, Arthur CMissouri	Orminski, John Charles Illinois
Lautenschlager, Frank. South Dakota	Orris, Edward ClessonCanada
*Lavin, CharlesIllinois	Ovens, Hugh JamesCanada
*Lerner, AlexanderIllinois	Page, Manley AlmanIowa
*Levy, James EIllinois	*Palestrant Charles Till:
Lewis, William GlennIllinois	*Palestrant, CharlesIllinois
	*Parker, Willis JTexas
*Lindgren, Arthur Edward. Montana	Payne, MiltonNew York
Lippel, Henry CIllinois	*Pearson, Andrew Rudolph
Liu, JohnIllinois	Minnesota

^{*}Matriculated, but not in attendance.

Pearson, Earnest AllenUtah
*Peguese, Robert LMassachusetts
*Pokala Joseph Ain Hawaii
*Pekelo, Joseph AiuHawaii Peters, George AllenIllinois
Peters, George AllenIllinois
*Peterson, Nathaniel A. Minnesota Piirto, Jacob ArthurMichigan
Piirto, Jacob ArthurMichigan
Pinkerton, Robert GeorgeIndiana
*Podolsky, Hyman JIllinois
Doble May Wisconsin
Pohle, MaxWisconsin
*Polokoff, IrwinMichigan Powell, Raymond HIllinois
Powell, Raymond HIllinois
*Pritchard, William D. Pennsylvania
Quanrud, Clarence MMinnesota
Quayle, Lyle SMichigan Ranfranz, Oscar EMinnesota Raz, Lope GPhilippine Islands
Ranfranz Oscar E Minnesota
Pan Lane C Philippine Islands
Raz, Lope G I imposite Islands
Rethwill, Wesley HMinnesota
Rivkin, Samuel BIllinois Roeser, Arnold Nicholes.Minnesota
Roeser, Arnold Nicholes. Minnesota
Rosen, Nathan HIllinois
*Rosenzweig, Michael MIllinois
*Rossen Fugene Illinois
*Rossen, EugeneIllinois Rothenberg, Edward JNew York
Rothenberg, Edward J New Tork
Ruesch, William EIllinois
Rusdal, Sigurd CWisconsin
Ruesch, William EIllinois Rusdal, Sigurd CWisconsin Rutten, Ruben Joseph.North Dakota
Sandberg, Gilbert EIllinois
Sansone, Hugo EIllinois
*C II III::-
Scherockel Coords Illinois
Scherscher, George
Schnaidt, Theodore B. South Dakota
Schoen, William JOhio
Schultz, Carl EIllinois
Schulz, FredIllinois
Schumacher, Gerh. PIllinois
Scherschel, George Illinois Schnaidt, Theodore B. South Dakota Schoen, William J Ohio Schultz, Carl E Illinois Schulz, Fred Illinois Schumacher, Gerh. P Illinois *Shapiro, Isador H Illinois *Shapiro, Isador H Illinois
*Sharf, Louis DIllinois
Charres Clude H Illinois
Shawgo, Clyde H. Illinois Sheafer, George Illinois Shepherd, Russell P. Canada
Sheafer, GeorgeIllinois
Shepherd, Russell PCanada
Shields, Roy CIndiana
Shields, Roy C Indiana Simmons, Giffin F Missouri Simonis, Wesley O Wisconsin
Simonis, Wesley O Wisconsin
Skehar Harry George Canada
Ckladavaki Laa Illinaia
*Clair I D.
"Slakis, Lawrence PeterIllinois
Small, ElliottB. W. I.
Sklodowski, Leo Illinois *Slakis, Lawrence Peter Illinois Small, Elliott B. W. I. Smith, Charles E North Dakota *Smith, DeWitt H Iowa
*Smith, DeWitt HIowa
Smith, Emerson LCanada
,

Smith, Everett DonaldMichigan
Smith Lester F Michigan
Smith, Lester E Michigan Smith, Roy Pomphrette Indiana Smith, Wayne B
Smith Wayne R
Spyder Pichard H Illinsia
Snyder, Richard HIllinois Solberg, Francis AMinnesota Solier, Charles WinslowWyoming
Solverg, Francis AMinnesota
Soller, Charles Winslow Wyoming
Souza, Joseph N
*Speckhard, Eric George. Michigan
Starksen, Clifford Merle
Stearns, Clarence FIllinois
Stearns, Clarence FIllinois
Stearns, Eugene MarionIllinois Stephens, James DIndiana Strunk, Henry FIllinois
Stephens, James DIndiana
Strunk, Henry FIllinois
Sugrue, JamesIllinois
Supensky, PhillipIllinois
Swartz, Aaron EIllinois
Sugrue, James Illinois Supensky, Phillip Illinois Swartz, Aaron E. Illinois Syverson, Howard Wisconsin
laber, Albert WarrenIllinois
Tang, Chu Fook
*Tarter, Martin AlexVirginia
Taufman, Harvey R Wisconsin
Taufman, Harvey RWisconsin *Taylor, Samuel BrownNew York
Teeters, Leland Guy Kansas
Teeters, Leland GuyKansas *Thomas, Percy WPennsylvania
Thompson, Charles M
Thompson Norman G Illinois
Turbow Morris O Illinois
Tweedle Thomas Wedmore
South Dakota
Twelves, RalphUtah
*Urie Bruce Arthur Canada
*Urie, Bruce ArthurCanada *Urie, Earle HaroldCanada Uzubel, Anthony MIllinois
Uzuhel Anthony M Illinois
Valentine Helger III-h
Valentine, Holger Utah VandenBerg, Paul H Illinois
vandenberg, raul filillnois
Vanoucek, EdwinIllinois Veasy, Paul JohnUtah
Veasy, Paul JohnUtah
Vertuno, DanielIllinois
Vertuno, DanielIllinois VonRuden Henry B Wisconsin
Vertuno, DanielIllinois VonRuden, Henry BWisconsin *Wagner, LouisIllinois Walker, Charles EWisconsin *Ward, Robert NormanIllinois
Vertuno, Daniel
Vertuno, Daniel
Vertuno, DanielIllinois VonRuden, Henry BWisconsin *Wagner, LouisIllinois Walker, Charles EWisconsin *Ward, Robert NormanIllinois

^{*}Matriculated, but not in attendance.

West, Marie Eugenie Antoinette	Witkowski, Charles B Illinois *Wojahn, Elmer J Indiana Wolfe, Lynn B West Virginia *Woods, Earl A North Dakota Woods, Frank N Canada *Woody, William E Oklahoma Woolley, Leland Smith Idaho Yalowitz, Myer Illinois Zeiss, Elmer Clarence Illinois Zuber, Harry G Illinois
GRADUAT	TES, 1920
Auerbach, Bernard	Kamins, Harry H Illinois Kerwin, Joseph Francis Illinois Ludwig, William Raymond. Indiana Macey, Harry P Minnesota Martin, Eric Illinois Monson, Harry Alfred Illinois Riegel, Harry J Illinois Roman, Benjamin Andrew Ohio Root, Melvin Austin, Jr Illinois Runyan, Lewis Nichols Illinois Schwartz, Abel Evan Illinois Scises, John Goddard Illinois Seise, John Goddard Illinois Seidenberg, Alfred H Wisconsin Starshak, Tom Cyril Illinois Strauss, William John Illinois Strauss, William H Wisconsin Thorsen, Arthur Valdimar Illinois Tillotson, Kendall S Illinois Tilpet, Bert Minnesota Walling, Myron Bliss Illinois Wedeberg, Carl Oscar. North Dakota Williams, Russell Reed Montana
	,
Carrington, Walter R., D.D.S. Texas Clark, H. R., D.D.S	Lipschitz, Harry W., D.D.S Missouri McNinch, Joseph S., D.D.SIllinois Morris, Craig, D.D.SNebraska Ridgway, Asa J., D.D.SMissouri Ross, E. W., D.D.SKansas Sakurada, Goro, D.D.SIllinois Severns, Walter S., D.D.S.Montana Schopf, Henry J., D.D.S.Minnesota Smith, David H., D.D.SKentucky Taylor, Joseph A., D.D.SMissouri Thatcher, Joseph E., D.D.SOhio Vaughn, James G., D.D.S.Arkansas Wilson, Homer L., D.D.SKentucky Wolverson, Lloyd B., D.D.S

^{*}Matriculated, but not in attendance.

Geographical Distribution of Students

Seniors	Juniors	Sopho- mores	Fresh- men	Post- Graduates	Total
Alabama		I	2		4
Arizona		3	I		5
Arkansas			I	1	2
Australia			1		I
British West Indies			I		I
California			2		2
Canada	4	13	19		36
China		I	í	1	3
Colorado 1	I	1			3
District of Columbia	1	1	2	1	5
Florida					I
Georgia			I	1	2
Greece			I		I
Hawaii 2			4		6
Idaho	I	4	3		8
Illinois 15	36	8 i	131	3	266
Indiana 7	9	15	25		56
Iowa 2	2	12	10	I	27
Kansas 2	I		3	I	7
Kentucky		I	I	2	4
Maryland			I		2
Massachusetts		I	2		3
Michigan 4	4	8	24	I	41
Minnesota 3	I	4	17	I	26
Missouri I		3	2	3	9
Montana 1		4	5	I	II
Nebraska 1		4	4	I	10
New Jersey			I		I
New Mexico			I		I
New York	1		9		10
North Dakota	I	10	10		21
Ohio I		3	5	2	11
Oklahoma	I	3	I		5
Pennsylvania			5	I	6
Philippine Islands			I		I
South Dakota 4	2	6	9		21
Tennessee 1	2		I		4
Texas			4	2	7
Utah		6	10	I	17
Virginia	I	I	2	• • •	4
Washington 1	I	3	I		6
West Virginia			I	2	3
Wisconsin 3	4	8	23		38
Wyoming		,	2		2
	72	197	350	26	700
54	73	197	330	20	700

Northwestern University Dental School Alumni Association

OFFICERS FOR 1920-1921

Benjamin S. Partridge, President, Chicago.

J. A. Dinwiddie, First Vice-President, Lowell, Ind.

J. H. Hospers, Second Vice-President, Chicago.

James L. Morlan, Secretary and Treasurer, 25 E. Washington St., Chicago.

EXECUTIVE COMMITTEE

T. B. S. Wallace, Chairman, Chicago.

G. G. Knapp, Chicago.

G. E. Meyer, Chicago.

The annual Home-coming Clinic is held on Monday and Tuesday of commencement week each year at the University Building.

The Association publishes a quarterly Journal, which is a medium for the circulation of articles of interest to Northwestern alumni and for the exchange of friendly greetings. The Alumni Association and the Journal exist for the purpose of maintaining and advancing all things of mutual interest to the alumni and the School.

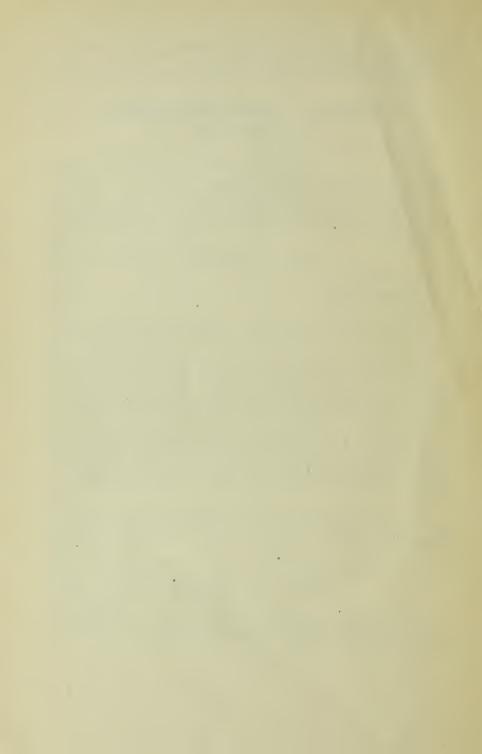
All members of the Association in good standing will receive the Journal. Any graduate of the Northwestern University Dental School may become a member of the Alumni Association upon payment of the membership fee of one dollar and dues of one dollar annually.

We ask that the Alumni support the Association and the Journal, and co-operate earnestly with the officers in making our official publication a still greater success.

For information regarding the Association, address the Secretary.

James L. Morlan, Secretary-Treasurer, 25 E. Washington St., Chicago.

For information regarding the School, address Northwestern University Dental School, 31 W. Lake St., Chicago.







Northwestern University

Evanston — Chicago

¶ THE COLLEGE OF LIBERAL ARTS, ideally located in Evanston, offers well organized courses for general education, with special preparation for the professions and for other pursuits requiring broad training, and special courses in Religious Education and in Physical Education.

¶ THE GRADUATE SCHOOL, in Evanston, extends non-professional training and research beyond the College curriculum, with courses leading to advanced degrees.

¶ THE MEDICAL SCHOOL, in Chicago, is one of the best equipped in the United States and its reputation for efficiency is well-established. Numerous hospitals in close proximity are open to students. Clinical material is abundant.

¶ THE LAW SCHOOL, the oldest in Chicago, offers unexcelled library and research facilities. Its courses leading to degrees prepare for practice in any state.

¶ THE COLLEGE OF ENGINEERING, on the campus in Evanston, offers a five-year course of technical training in a University environment, leading to the degrees of Bachelor of Science and Civil Engineer or Electrical Engineer.

¶ THE DENTAL SCHOOL, in Chicago, is recognized as one of the leading schools for dental training and investigation. Its clinical facilities are unsurpassed.

¶ THE SCHOOL OF MUSIC in three well-equipped buildings offers exceptional advantages for the thorough study of music, professional or otherwise. It is located in Evanston.

¶ THE SCHOOL OF COMMERCE, in Chicago and Evanston, offers professional and scientific education for business with emphasis on the training of business executives. Day and evening work, laboratory courses, and business research.

¶ THE SCHOOL OF SPEECH, in Evanston, is unique in having university relations. It offers a well arranged course in interpretative literature.

THE JOSEPH MEDILL SCHOOL OF JOURNALISM, in Chicago and Evanston, offers comprehensive courses in editing, news writing, reporting, newspaper administration, et cetera.

For information regarding any School of the University, address the President's Office, Northwestern University Building, Chicago, Illinois.